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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/635,712	08/07/2003	Hiraku Murayama	1011350-000318	1927

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BUCHANAN, INGERSOLL & ROONEY PC  
POST OFFICE BOX 1404  
ALEXANDRIA, VA 22313-1404

EXAMINER
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FOREMAN, JONATHAN M

ART UNIT	PAPER NUMBER
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3736

NOTIFICATION DATE	DELIVERY MODE
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08/06/2009

ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

ADIPFDD@bipc.com

## Office Action Summary

**Application No.**

10/635,712

**Applicant(s)**

MURAYAMA ET AL.

**Examiner**

JONATHAN ML FOREMAN

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**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period **will** apply and **will** expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply **will**, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 02 March 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1,3,5-7 and 31-43 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,3,7 and 31-43 is/are rejected.
- 7) ☒ Claim(s) 5 and 6 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date: \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_.

### DETAILED ACTION

1. The following Office Action contains new grounds of rejection. Accordingly, the following action has been made Non-Final.

#### *Claim Rejections - 35 USC § 103*

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1, 3 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,865,768 to Orr in view of JP11-151578A to Sakata.

In regard to claims 1, 3 and 7, Orr discloses a guide wire (Figure 1) including a first wire (30) disposed on the distal side of the guide wire; a second wire (25) disposed on the proximal side from the first wire, the second wire having rigidity higher than that of the first wire (Col. 2, lines 44 – 64); wherein the first wire and the second wire are joined to each other by welding (Col. 2, line 54); a cover layer is disposed over the welded portion (Col. 3, lines 8 – 9); the first wire and the second wire are not helical coils; material forming at least one of the proximal end of the first wire and the distal end of the second wire constitutes at least a part of the weld; the second wire has a first portion provided in the vicinity of the distal end of the second wire and a second portion provided on the proximal side from the first portion; and the first portion has rigidity lower than that of the second portion as a result of a taper (Figure 1). Orr discloses a spiral coil (15) covering at least a distal end portion of the first wire. The Examiner considers the location of the weld to be on a thinned portion of the guide wire. Although Orr discloses a welded portion, Orr fails to disclose the

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welded portion formed by the welding having a projection projecting in the outer peripheral direction; the projection extending on both axial sides of the welded portion. However, Sakita teaches a welded portion between two wires having a projection projecting in the outer peripheral direction; the projection extending on both axial sides of the welded portion (Figure 1). It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the welded portion disclosed by Orr to include a projection as disclosed by Sakita to improve the mechanical properties of the wires at the welded portion [0010].

4. Claims 31 – 43 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,980,471 to Jafari in view of JP11-151578A to Sakata.

In regard to claims 31 - 43, Jafari discloses a guide wire (Figure 1) having a first wire (12) being formed of a pseudo-elastic alloy (Col. 6, lines 62 – 65) and disposed on the distal side of the guide wire; a second wire (11) being formed of a material having an elasticity modulus greater than the modulus of the first wire and disposed on the proximal side from the first wire (Col. 8, lines 38 – 46); a spiral coil (22) covering at least a distal end portion of the first wire; wherein the first wire and the second wire are joined to each other at a portion (Figure 3) and a cover layer (Col. 6, lines 36 – 42) is disposed over the portion and directly contacts the outer peripheral surface of the joined portion. The coil does not cover the joined portion (Figure 1). The proximal most end of the coil is positioned on a distal side of the joined portion (Figure 1). However, Jafari fails to disclose the joined portion including a welded portion forming a projection that projects in an outer peripheral direction, the projection extending on both axial sides of the welded portion; the welded portion at which the first and second wires are welded to each other being located at the maximum outer-diameter portion of the projection; the material forming at least one of the proximal end of the first wire and the distal end of the second wire constituting at least a part of the projection. However,

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Sakita teaches joining two wires with a welded portion having a projection projecting in the outer peripheral direction; the projection extending on both axial sides of the welded portion; the welded portion at which the first and second wires are welded to each other being located at the maximum outer-diameter portion of the projection (Figure 1). The claims would have been obvious because the substitution of one known element for another would have yielded predictable results to one of ordinary skill in the art at the time of the invention. Because both Jafari and Sakita teach mechanisms for joining two wires together it would have been obvious to one skilled in the art at the time of the invention to substitute one mode of connection for the other to achieve the predictable results of firmly joining together the two wires.

#### ***Allowable Subject Matter***

5. Claims 5 and 6, are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

#### ***Response to Arguments***

6. Applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection.

#### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JONATHAN ML FOREMAN whose telephone number is (571)272-4724. The examiner can normally be reached on Monday - Friday 8:00 am - 4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Max Hindenburg can be reached on (571)272-4726. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/J. M. F./  
Examiner, Art Unit 3736

/Max Hindenburg/  
Supervisory Patent Examiner, Art Unit 3736